## **AMENDMENTS TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings of claims in the application:

## **LISTING OF THE CLAIMS**

1. (Original) A method of hydraulically fracturing a subterranean formation, comprising the step of:

contacting a subterranean formation with a treatment fluid formulation at a flow rate and pressure sufficient to produce or extend a fracture in the formation, wherein the treatment fluid formulation comprises a third polymeric material which comprises a second polymeric material cross-linked by a first polymeric material, wherein said first polymeric material comprises:

(i) a first polymeric material having a repeat unit of formula

wherein A and B are the same or different, are selected from optionally-substituted aromatic and heteroaromatic groups and at least one comprises a relatively polar atom or group and R<sup>1</sup> and R<sup>2</sup> independently comprise relatively non-polar atoms or groups; or

(ii) a first polymeric material prepared or preparable by providing a compound of general formula

wherein A, B, R<sup>1</sup> and R<sup>2</sup> are as described above, in an aqueous solvent and causing the groups C=C in said compound to react with one another to form said first polymeric material.

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- 2. (Original) A method according to claim 1, wherein said first and second polymeric materials are reacted to form said third polymeric material prior to the treatment fluid formulation being injected via a well bore into the subterranean formation.
- 3. (Previously Presented) A method according to claim 1, wherein said treatment fluid formulation has a viscosity at 25<sup>o</sup>C in the range 50 to 500cp at a sheer rate of 100s<sup>-1</sup>.
- 4. (Previously Presented) A method according to claim 1, wherein said treatment fluid formulation has a viscosity at 200°F in the range 20 to 100cp, measured at a sheer rate of 100s<sup>-1</sup>.
- 5. (Previously Presented) A method according to claim 1, wherein said treatment fluid formulation is aqueous and includes at least 90wt% water.
- 6. (Previously Presented) A method according to claim 1, wherein said treatment fluid formulation includes one or more proppants.
- 7. (Previously Presented) A method according to claim 1, wherein said treatment fluid formulation includes breaker means for breaking the third polymeric material to reduce its viscosity and facilitate clean-up of the fracture.
- 8. (Original) A method according to claim 7, wherein said breaker means is arranged to cleave chains of said third polymeric material.
- 9. (Previously Presented) A method according to claim 7, wherein said breaker means is arranged to have a delayed action and includes means for restricting contact between an active material thereof and said third polymeric material.

- 10. (Previously Presented) A method according to—claim 1, which comprises selecting a said first polymeric material; selecting a said second polymeric material which includes a functional group which is able to react in the presence of said first polymeric material to form a third polymeric material; and causing the formation of said third polymeric material by a reaction involving said first and second polymeric materials.
- 11. (Original) A method according to claim 10, wherein the ratio of the wt% of said first polymeric material to the wt% of said second polymeric material selected for preparation of said third polymeric material is less than 0.15 and is at least 0.01.
- 12. (Previously Presented) A method according to claim 11, wherein the sum in said treatment fluid formulation of the wt% of the first and second polymeric materials selected for preparation of said third polymeric material is at least 1wt% and is less than 8wt%.
- 13. (Previously Presented) A method according to claim 1, wherein, in the preparation of said third polymeric material, a catalyst is provided for catalysing the reaction of the first and second polymeric materials.
- 14. (Previously Presented) A method according to claim 1, wherein one of A or B represents an optionally-substituted aromatic group and the other one represents an optionally substituted heteroaromatic group.
- 15. (Currently Amended) A method according to claim 1, wherein said first polymeric material is of formula:

wherein n is an integer.

16. (Previously Presented) A method according to claim 1, wherein said second

polymeric material is selected from optionally substituted polyvinyl alcohol, polyvinyl acetate, and polyalkalene glycols.

- 17. (Currently Amended) A method according to claim 1, wherein said <u>second</u> polymeric material includes at least one vinyl alcohol/vinyl acetate copolymer.
- 18. (Currently Amended) A method of preparing a treatment fluid formulation comprising:

selecting a first polymeric material and a second polymeric material as described in claim 1; and

causing the formation of a said third polymeric material by a reaction involving said first and second polymeric materials.

contacting said first and second polymeric materials at a weight ratio of first to second in the range 0.025 to 0.067 to form said third polymeric material; and

contacting the third polymeric material which forms with 5 to 20 wt% proppants and with an encapsulated breaker means which is arranged to release an active material which can break the third polymeric material.

- 19. (Cancelled)
- 20. (Currently Amended) A treatment fluid formulation comprising:

water;

a third polymeric material according to-claim 1; and

one or more proppants; and

an encapsulated breaker means which is arranged to release an active material which can break the third polymeric material.

- 21. (Original) A formulation according to claim 20, which comprises 1 to 5wt% of said third polymeric material, 65 to 90wt% water and 5 to 30wt% of proppants.
- 22. (Cancelled)
- 23. (Cancelled)
- 24. (Cancelled).
- 25. (Currently Amended) A method of recovering oil from a subterranean formation comprising:
- A) hydraulically fracturing a subterranean formation in a method which comprises: as described according to claim 1;

contacting a subterranean formation with a treatment fluid formulation at a flow rate and pressure sufficient to produce or extend a fracture in the formation, wherein the treatment fluid formulation comprises a third polymeric material which comprises a second polymeric material cross-linked by a first polymeric material and an encapsulated breaker means which is arranged to release an active material which can break the third polymeric material when an area fractured closes down whilst being propped by a proppant, wherein said treatment fluid formation has a viscosity at 25°C in the range 200-500 cp when measured at a shear rate of  $100s^{-1}$  and a viscosity at 200°F of greater than 50cp when measured at a shear rate of  $100s^{-1}$ , wherein said first polymeric material comprises:

## (i) a first polymeric material having a repeat unit of formula

wherein A and B are the same or different, are selected from optionally-substituted aromatic and heteroaromatic groups and at least one comprises a relatively polar atom or group and R<sup>1</sup> and R<sup>2</sup>

independently comprise relatively non-polar atoms or groups; or

(ii) a first polymeric material prepared or preparable by providing a compound of general formula

wherein A, B, R<sup>1</sup> and R<sup>2</sup> are as described above, in an aqueous solvent and causing the groups C=C in said compound to react with one another to form said first polymeric material;

- B) allowing an area fractured to close down whilst being propped by a proppant; wherein as a result of said close down, a breaker means releases an active material which is arranged to lower the viscosity of the treatment fluid formulation of the first aspect; and
- C) <u>allowing oil to flow to the surface after the viscosity of the treatment fluid</u> formulation has been lowered.